



Bariatric surgery in adolescents—a vital treatment option

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As a faculty of medicine specializing in adult and pediatric obesity care, I am compelled to address the critical issue of bariatric surgery in adolescents with severe obesity. The recent study (1) titled “Mental health from 5 years before to 10 years after bariatric surgery in adolescents with severe obesity: a Swedish nationwide cohort study with matched population controls” by Bruze *et al.* provides valuable insights into the impact of bariatric surgery on mental health outcomes in this vulnerable young population. The assumption that substantial weight loss from bariatric surgery will positively influence both short-term and long-term mental health in adolescents with severe obesity is questioned.

The study is the largest adolescent bariatric surgery prospective cohort from nationwide registries, which means it tracks the health outcomes of adolescents who have undergone bariatric surgery over a long period. This design allows for the evaluation of long-term effects, which is crucial as many studies tend to focus on short-term outcomes. The study provides robust evidence that psychiatric diagnoses and psychiatric drug prescriptions were more common among adolescents with severe obesity both pre- and post-bariatric surgery than among matched adolescents from the general population. The study also

suggests that adolescents who undergo bariatric surgery do not necessarily have more mental health problems than their peers with severe obesity who do not undergo surgery. This finding is significant as it challenges common misconceptions about the mental health impact of bariatric surgery. Adolescents undergoing bariatric surgery also suffer from more substance abuse disorders than their peers in the general population as per the study (1). Research in adults also shows an increased risk of substance use disorder, particularly with alcohol, after bariatric surgery (2). This highlights the need for further research in post-bariatric maladaptive eating behavior and nutritional deficiencies. Overall, these findings underscore the complexity of treating severe obesity in adolescents and the importance of considering both the physical and mental health outcomes when evaluating the long-term effectiveness of bariatric surgery. As always, a comprehensive, patient-centered approach is key to ensuring the best possible outcomes for these young patients (3,4).

The weight of the matter

Severe obesity in adolescents is not merely a cosmetic concern; it is a complex medical disease with far-reaching

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consequences including cardiovascular morbidity and mortality (5). As we witness the rising prevalence of obesity-related comorbidities (6), we must explore evidence-based interventions that can transform lives. Bariatric surgery, once reserved for adults, has emerged as a vital treatment option for adolescents who are in dire need of effective solutions (4).

The groundbreaking Teen-LABS (Teen Longitudinal Assessment of Bariatric Surgery) study (7), conducted across multiple centers, has significantly contributed to our understanding of bariatric surgery outcomes in adolescents. Key findings from this study and others include: (I) adolescents who undergo bariatric surgery experience substantial and sustained long-term weight loss, comparable to adults, with higher remission rates for type 2 diabetes and hypertension (8,9). (II) Long-term follow-up data demonstrate that weight reduction persists beyond the initial post-operative period, leading to improvements in metabolic parameters such as insulin sensitivity and lipid profiles (9,10). (III) Contrary to prevailing assumptions, certain mental health outcomes such as eating disorders (11), binge eating disorder (12), and depression are generally favorable after bariatric surgery (13). Adolescents report improved self-esteem, reduced depression and anxiety, and enhanced quality of life (14). Importantly, these improvements are not overshadowed by the challenges associated with significant weight loss. While any surgical procedure carries inherent risks, the benefits of bariatric surgery in adolescents outweigh the potential downsides. Adolescents with severe obesity face a higher risk of cardiovascular disease, type 2 diabetes, and obstructive sleep apnea (15). Bariatric surgery offers a chance to mitigate these risks and improve overall health and quality of life.

Realistic expectations and risk mitigation

As we advocate for the availability of bariatric surgery for pediatric patients, we must emphasize the need for realistic expectations. Pre-operative consultations should candidly discuss mental health outcomes, addressing concerns and dispelling myths. Moreover, patients and their families must be informed about the risks of alcohol use disorder and potential self-harm, ensuring responsible post-operative behavior. Bariatric surgery is not a standalone solution. A multidisciplinary team—including pediatricians, dietitians, psychologists, and surgeons—plays a crucial role in pre-operative assessment, post-operative support, and long-term follow-up. Collaboration ensures holistic care and optimal outcomes.

A call to action

In conclusion, as medical professionals, we should recognize and balance the benefits and risks. Bariatric surgery is not a panacea, but it is a life-saving evidence-based treatment for adolescents trapped in the vicious cycle of severe obesity coupled with disability and myriad of medical complications. Let us champion evidence-based care, advocate for equitable access, and empower our young patients with hope and healing. In summary, bariatric surgery not only addresses metabolic health but also positively impacts adolescents' mental, emotional well-being, and quality of life. It is essential to consider both clinical and psychosocial aspects when evaluating the suitability of bariatric surgery for adolescents with severe obesity.

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